

What is claimed is:

1. A storage system comprising:

a port functioning as an interface to a host;

a cache memory;

a shared memory;

a control device connected to said port, said cache memory, and said shared memory through a connection line; and

a disk device connected to said control device;

wherein said storage system coupled to a service terminal connected thereto for receiving first priority information on each logical device provided for said host;

wherein said control device maps more physical devices to a logical device with a high priority than that with a low priority based on said first priority information received from said service terminal; and

wherein in the event of a failure, said control device performs control such that data held in said cache memory and belonging to a logical device is saved to plural physical devices mapped to said logical device.

2. The storage system as claimed in claim 1, wherein said shared memory stores a mapping relationship between each logical device and a plurality of physical devices, said mapping relationship being established based on said

first priority information.

3. The storage system as claimed in claim 1, wherein:

said service terminal is adapted to receive second priority information indicating a task priority; and

in the event of a failure, said control device performs control such that a job with a high priority is executed after it is dequeued from a priority queue within said storage system based on said second priority information received from said service terminal.

4. The storage system as claimed in claim 3, wherein said shared memory stores said second priority information received by said service terminal.

5. The storage system as claimed in claim 1, wherein if data is lost in the event of a failure, said storage system outputs information indicating a logical device and a position in said logical device corresponding to said lost data to said service terminal.

6. A method for controlling a storage system which includes:

a port functioning as an interface to a host;

a cache memory;

a shared memory;

a control device connected to said port, said cache memory, and said shared memory through a connection line;

and

a disk device connected to said control device;

wherein said method comprises:

a first step of receiving first priority information on each logical device provided for said host; and

a second step of mapping more physical devices to a logical device with a high priority than that with a low priority based on said first priority information received at said first step, and in the event of a failure, saving data held in said cache memory and belonging to a logical device to a plurality of physical devices mapped to said logical device.

7. The method as claimed in claim 6, further comprising:

a third step of storing a mapping relationship between each logical device and a plurality of physical devices into said shared memory, said mapping relationship being established based on said first priority information received at said first step.

8. The method as claimed in claim 6, further comprising:

a fourth step of receiving second priority information indicating a task priority; and

a fifth step of, in the event of a failure, performing control such that a job with a high priority is

executed after it is dequeued from a priority queue within said storage system based on said second priority information received at said fourth step.

9. The method as claimed in claim 8, further comprising:

a sixth step of storing said second priority information received at said fourth step, into said shared memory.